



HIGH TABLE SEMI-AUTOMATIC STRAPPING MACHINE

USER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# 45406

Thank you very much for choosing an Ironton™ product. For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This strapping machine is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this item not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use this product until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions, please call 1-800-222-5381.

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TECHNICAL SPECIFICATIONS

Item	Description
Packing Speed	<3 second/cycle
Min Package	2in.
Tension Force	6.6lbs.-154lbs. (3kgs -70kgs)
Width of PP Strap	0.24in.–0.6in. (6-15mm), preset at 12mm
Thickness of PP Strap	0.02in.-0.0335in. (0.5mm-0.85mm)
Power Voltage	AC110V
Power Frequency	60HZ Single phase
Power	two DC motors: 90W + 60W
Motor HP	1/5 HP
Strap Core Inner Diameter	200mm
Ambient Temperature	41°F-104 °F (5-40 °C)
Relatively Humidity	35-85%RH
Transportation/ Storage Temperature	-13° - +131°F (-25- +55°C)
Machine Weight	143.2lbs.

GENERAL SAFETY REGULATIONS

- 1. Keep the work area clean and dry.** Damp or wet work areas can result in injury.
- 2. Keep children away from work area.** Do not allow children to handle this product.
- 3. Store idle equipment.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
- 4. Use the right tool for the job.** Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. Do not modify this equipment, and do not use this equipment for a purpose for which it was not intended.
- 5. Check for damaged parts.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace damaged or worn parts immediately.
- 6. Do not overreach.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
- 7. DO NOT use the equipment when tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating this equipment may result in serious personal injury.
- 8. Industrial applications must follow OSHA requirements.**

SPECIFIC OPERATION WARNINGS

 **WARNING:** Read and understand all instructions **BEFORE** operating.

 **WARNING:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

1. Before operating the machine, please fit over voltage and under voltage protection to the machine.

2. **Do not** place the machine on the slant place.
3. **Do not** move the machine when machine is running.
4. **Do not** place the machine on the wet or dusty place. Keep it clean and dry.
5. Properly ground the machine before operation. There is danger of electric shock when it does not connect to the ground wire or does not connect fully.
6. The sectional area of the extended flexible wire should be over 2 mm² and the length should be within 10m. The flexible wire beyond this scope can damage the machine, and can cause fire due to hot plug and socket.
7. Wear eye or face, and hand protection. Do not wear loose clothing.
8. Keep hands or other parts of the body out of the strap chute area during operation.
9. The temperature of the heater plate is very high. Do not touch.
10. **Do not** insert strap while there is not a package on the operation table.
11. **Do not** replace any safety parts of different specifications.
12. Shut off all electric power after machine operation or servicing machine.
13. **Do not** use water or steam to clean the machine.
14. **Do not** remove the electric control box cover if not necessary. Only trained engineers are allowed to open the electric box. Before opening, be sure to pull the power plug off.
15. The machine is used for strapping products or packages only.
16. **Do not** take off the panel, cover, door and other parts to use the machine. Taking off the parts will cause machine faulty and easy to cause human injury.
17. **Do not** modify the machine. Use the modified machine will cause human injury.
18. **Do not** put the wire on the passageway of forklift. Once the coat of wire is damaged or the wire is broken, it will cause danger.
19. **Do not** insert or pull out attaching plug with wet hand to avoid shocking danger.
20. **Do not** use the machine to strap wet products.
21. Make sure pull out the plug if the machine is not in use.
22. **Do not** put inflammable materials around the machine if the heater is in high temperature.
23. Keep this operation manual at your strapping machine. Refer to it often.

The following warning signs can not be removed or replaced randomly. They are labeled in the positions that will cause danger to human body. The power supply MUST be cut off before repair the machine.

- ①. **Warning sign 1** is used for heating positions. Do not touch the mechanical parts with the sign in case of scalding.



Warning Sign 1

- ②. **Warning sign 2** is used for the electric parts. It indicates danger of electric shock inside the machine after the door is removed.



Warning Sign 2

- ③. **Warning sign 3** indicates that the inner gearing parts can easily clamp hands. Keep your hands away from the parts with this label. Before maintenance, stop the machine and disconnect the plug.



Warning Sign 3

NOTE: Read the other signs carefully when operating to ensure safe and correct operation and to avoid danger.

INSTALLATION

One set of tools and spare parts is packed with each machine for use in making adjustments and for replacement of parts as needed. Please compare your supplied tools with the following list:

DESCRIPTION	QTY	DESCRIPTION	QTY
SCREWDRIVER	1	HEXAGON SPANNER M3	1
WRENCH 8*10MM	1	HEXAGON SPANNER M4	1
WRENCH 12*14MM	1	HEXAGON SPANNER M5	1
HEXAGON SPANNER M2.5	1	HEXAGON SPANNER M6	1

Installation of the machine requires that the machine be uncrated, placed in its proper position and secured in place (see Fig 1 for reference). Remove the screw on the top cap of speed reducer for ventilation. Make sure the power cord is plugged into the appropriate electrical outlet.

This machine must be installed on the dry, level and hard floor near the power supply. The power supply must be in line with the description of the nameplate on the side of machine.

The installation place must meet the following conditions:

Temperature: -4°F - 40°F (-20°C - 40°C) **Humidity:** ≤90%RH

Max load capacity of bottom plate: 72lb/ft² (350kg/m²)

Mini space required: 78.75in. × 59in. (2000mm×1500mm)

Others: Dry and well-ventilated, far way from smoke and fire, no corrosive substance

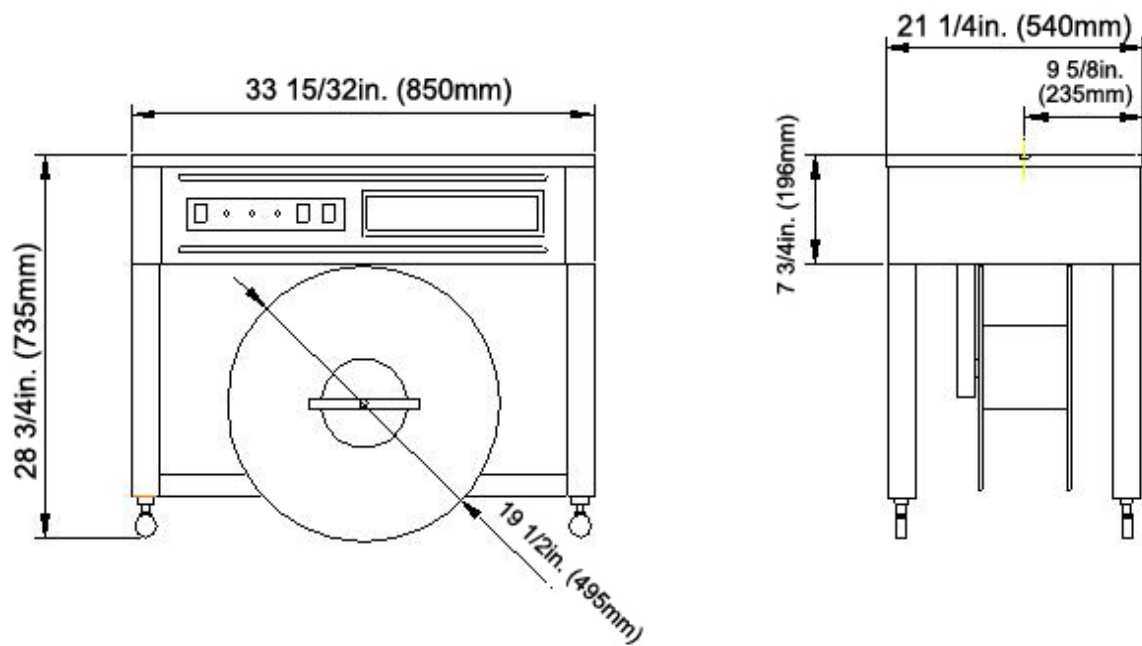


Fig. 1 Installation Dimension

START-UP

1. INTRODUCTION TO THE CONTROL PANEL

The control panel is at the upper right corner of the machine front plate (see Fig.2).

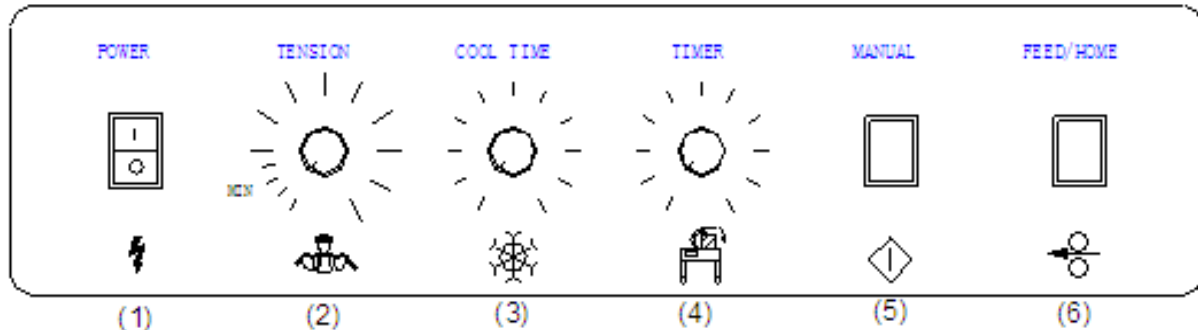


Fig. 2 Control Panel

(1) Power switch

Turn on the switch (position **I**), then the red light is on and you can operate the machine.

Turn off the switch (position **O**), cut down the power, then the machine stops.

(2) Tension force adjustment knob

Turn the knob clockwise to enlarge tension force. Larger tension force, faster the speed of retreat strap.

Note: When the tension force is large, operate carefully and avoid hurt from PP strap.)

(3) Cooling time knob

Turn the knob clockwise to lengthen the cooling time. The larger the tension force is, the longer cooling time you should set.

(4) Length adjustment knob

Rotating the knob can adjust the feeding length of the straps automatically, so that you can set up a standard length of the strap to fit the same packages. Each scale is about 500mm. Turn the knob clockwise to enlarge the feeding length of the straps.

(5) Manual start button

Manually start LS4 switch, the same function as PP strap interpolation.

(6) Manual feeding button

Press this button when the green light is on, the straps can be fed manually. While retracting strap, press this button will reset the machine.

NOTE: This machine can automatically switch off after a while of inactivity and restart as the strap is inserted.

2. INSTALLATION OF THE STRAP COIL (as shown in Fig. 3)

1. Screw off the hand wheel and take off the front strap reel.
2. Place a coil of strap on the back strap reel with correct direction allowing the shaft to poke through the plastic wrap. Make sure the straps wheel inner diameter clip in reel center claw.

NOTE: Install the strap coil with the right direction, so that the reel will turn clockwise when the strap is pulled off. (Refer to **FEEDING STRAPS** section as stated below)

3. Replace the front strap reel and reinstall the hand wheel.

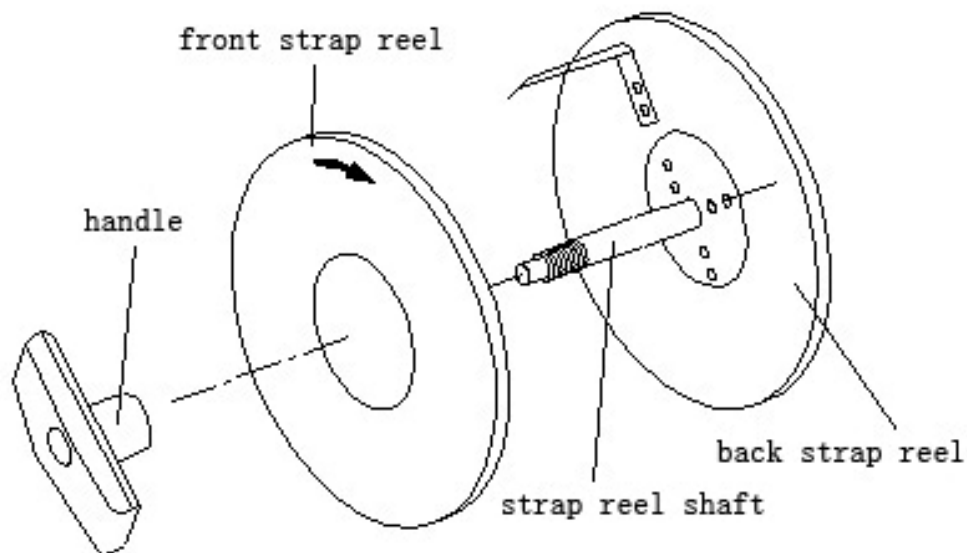


Fig.3 Strap Coil Installation

3. FEEDING STRAPS (as shown in Fig. 4)

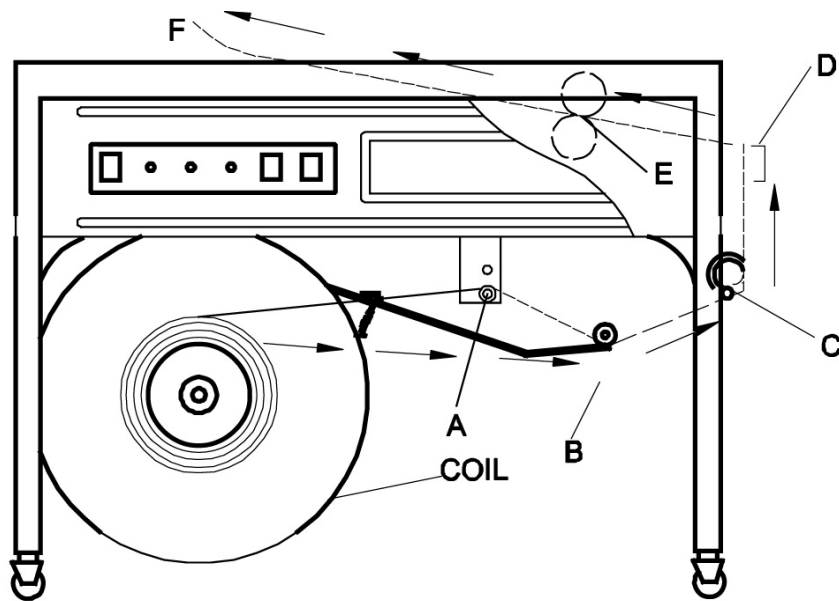


Fig.4 Feeding strap

⚠ WARNING: Before feeding the strap, make sure that the machine is turned off and the cord plug is pulled off from the electric outlet.

1. Pull the PP strap end until about 1 meter (3 feet) straps are off the reel.
2. Put the end of the strap through wheel (A) and (B), then to transition wheel (C), and come out from the side.
3. Insert the head of the straps to (D).
4. Continue to feed straps until it pass through the rollers (E).
5. Press the Manual feeding/ retracting button (6), the machine will run, and the strap is fed manually. Do not release the button until the end of strap comes out from point (F).

4. The function of potentiometer on PCB

RV1

Measure the voltage between two ends of capacitance C17 by adjusting RV1. Adjusting it clockwise, the voltage will increase and then the minimum tension increase. Adjusting it anti-clockwise, the voltage will decrease and then the minimum tension decrease. (Usually it is pre-adjusted at factory and no need to adjust again.)

RV2

When the machine starts, it takes 15 seconds to warm up. When it warms up, the indicator on the PC board flickers. The warm up process stops if the indicator not flickers. Adjusting RV2 clockwise, the heating voltage between two ends of the heater increase. Adjusting it anti-clockwise, the heating voltage between two ends of the heater decrease. (Usually it is pre-adjusted at factory and no need to adjust again if the temperature can reach requirements.)

OPERATION

⚠ WARNING: Before connect the power, set the power switch on the position of **O** (OFF). Make sure the machine is connected with the ground terminal to the earth. Do not touch heat parts, or you can be burnt.

1. Install coil A on dispenser (Refer to “**INSTALLATION OF THE STRAP COIL**” in **START-UP** section).
2. Feed the strap (Refer to “**Feeding Straps**” in **START-UP** section).

3. Connect power plug to power source (AC 110V, 60Hz).
4. Turn on the power switch and run the machine for 15 seconds to warm up to the operating temperature.
5. Place package on the table top, directly above the sealing head. Allow the package to contact the two package stops.
6. Manually pull the strap to encircle the package. Or press manual feeding button to gain enough for encircling package.
7. Insert strap end into slot, then machine will work automatically. Keep your hands away of the strap and slot during strapping.
8. After strapping, take the package away.

NOTE: Some adjustments may be required to let the machine work well. Please refer to the below section **ADJUSTMENT INSTRUCTIONS** to adjust accordingly.

⚠ WARNING: DO NOT sit on this machine as a bench.

⚠ CAUTION: Take care of your fingers during operation.

ADJUSTMENT INSTRUCTIONS

1. TEMPERATURE ADJUSTMENT

Open the top cover of the machine and find the temperature adjustment knob. Refer to Fig. 5.



Fig. 5 Temperature adjustment knob

The temperature increases when turning the knob on the transformer clockwise (The larger the number pointed is, the higher the temperature is). The adhesive affection will not be very good if the temperature too high or too low, so adjust in small increments. Normally, switch it on 4-6.

NOTE: If the temperature is adjusted too high (above 6), the high temperature heating filament is easy to be burnt out.

2. WIDTH ADJUSTMENT

This machine is designed specially for use with PP straps with length between 0.24in. (6mm) and 0.6in. (15mm). Adjust the distance between (2) (3) (4) and benchmark' width (1) or (2) to fit various width of strap. Generally, it should be 1mm wider than actual width of PP width. If the PP with poor quality, the distance should be larger. Otherwise send back will be a failure. Refer to Fig. 6.

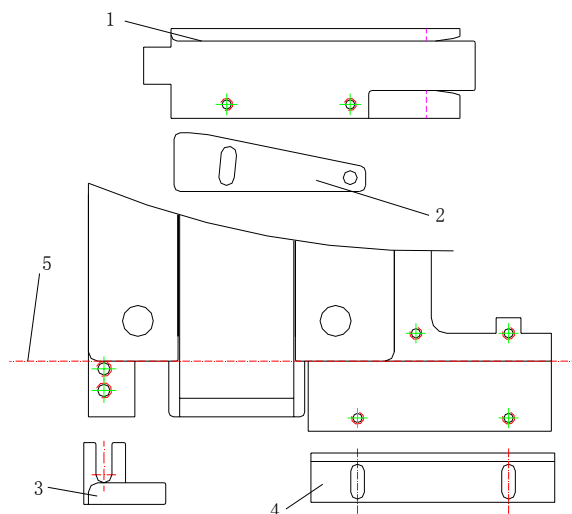
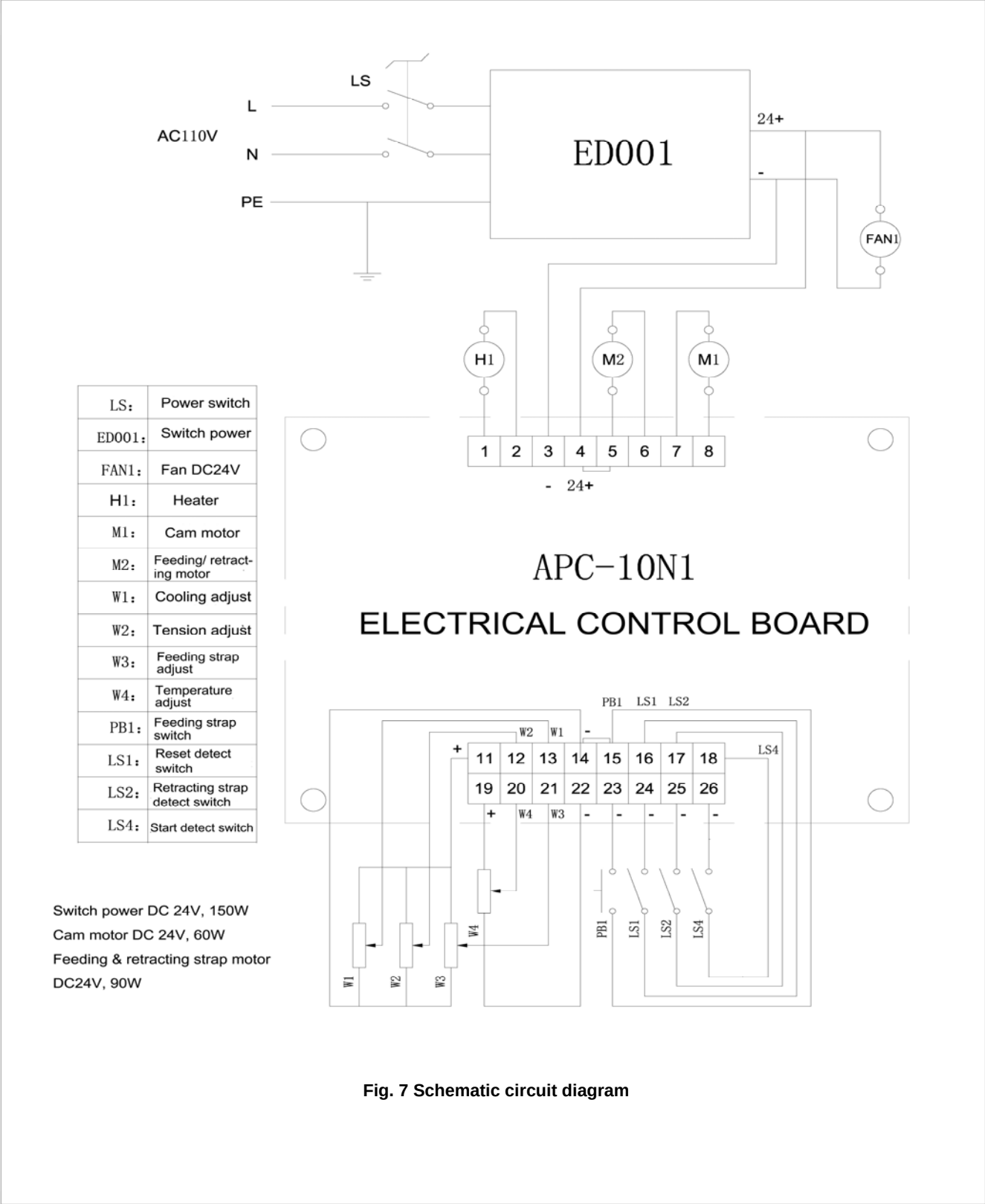


Fig. 6 Width Adjustment

ELECTRICAL DESCRIPTION

A circuit diagram of the electrical description is illustrated as below. See Fig. 7.

Schematic circuit diagram



Below are functions of each main micro switch on circuit.

LS1: It is at the right hand of Motor M1, refer to Fig. 8. The contact point will be pushed by cam of micro-switch when the machine is set to zero.

LS2: It is beside LS1. It detects the position of banding, retracting or cooling.

LS4: It is under the sliding board. The machine begins to pack when strap head hits the touch-contact switch through inserting slot.

HL1: Quick heat piece is at the right side of fan 1. When the machine starts, it can reach the proper temperature within 20 second.

Fan1: Fan, it can exhaust smoke while strapping.

M1: Main motor controls the cam, cuts straps and adhesives PP straps.

M2: Feeding and retracting strap motor. It controls sending strap and tensioning work.

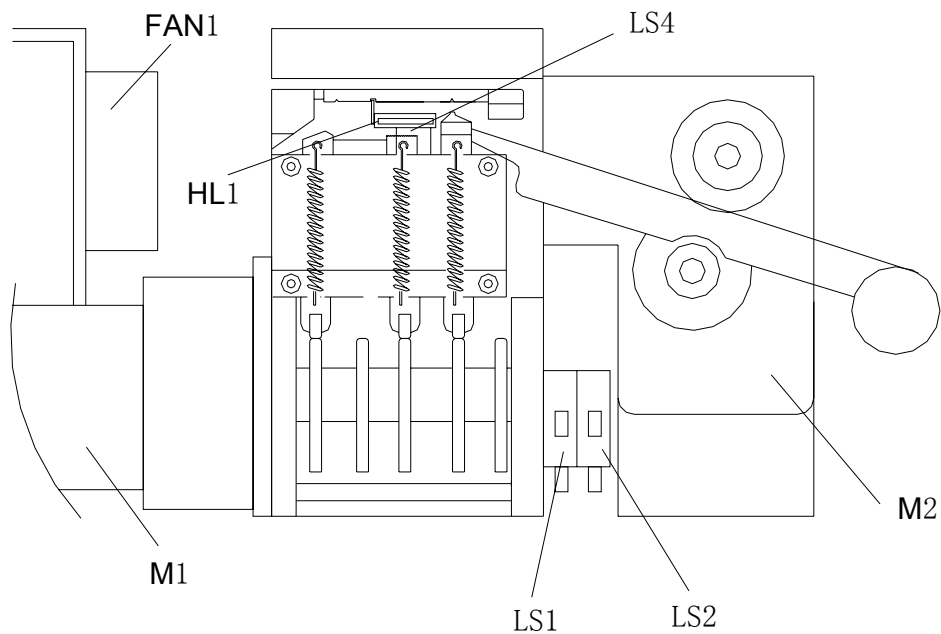


Fig. 8 Micro switches

PARTS CLEANING

1. UPPER SLIDE

Always keep the upper slide well fitted with both press bars, and keep it move smoothly. Thus it is important to keep the upper slide clean. Do the cleaning following the instructions below. Refer to Fig. 9.

- Remove the pull springs on the swaying rocker.
- Move backward the upper slide and take out.
- Wipe the slot between slide and press bars.
- Insert the lower slide into upper one, then screw the upper slide to the slot of lower one.
- Move the upper slide forward and backward to check whether it moves smoothly or not. If adjustment is required, skate on the right aiming at front top slot, left slot aiming at back top slot. Assure middle knife can drop and cut.
- Add some oil or light lubrication to the slot between slides and guides.
- If the upper slide can move smoothly, but cannot move back, check if the pull spring is flexible fatigue. If so, change it or cut it shorter.

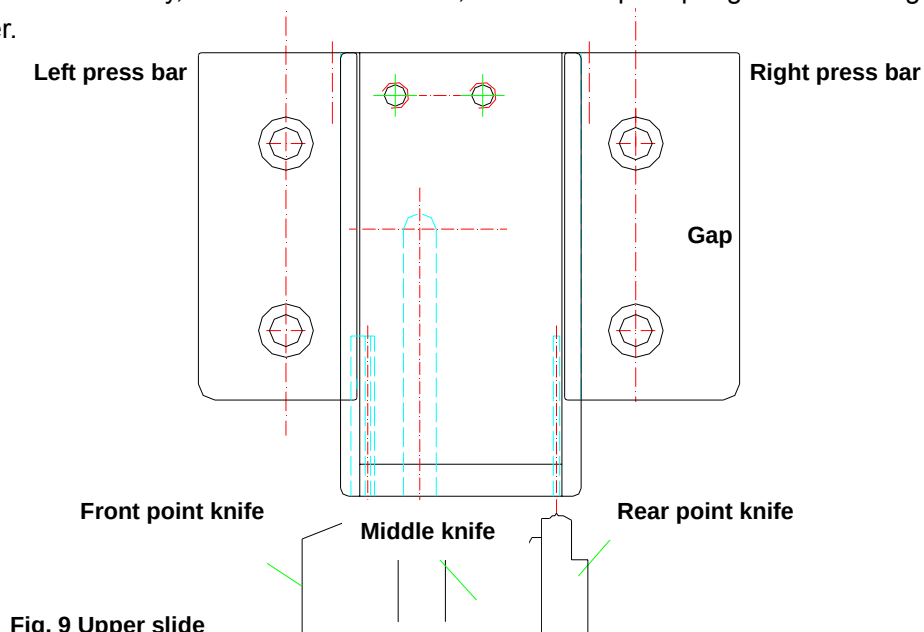


Fig. 9 Upper slide

2. Micro-switch cam

The position of micro-switch cam related to the action of micro switch LS1 and LS2. When the machine is zero set, LS1 is close circuit and LS2 is open circuit. Because LS1 and LS2 join together, do not need to consider the adjustment method of LS1 and LS2. Loosen the fixed screw. The cam have three faces, one high, one concave and one normal. When LS1 adjust to the highest face, it is close circuit. When LS1 adjust to the normal face, it is open circuit.

3. Middle knife and front top knife

Middle knife and front point knife must cooperate precisely to cut off strap. So it is very important to keep them clean. Do the cleaning following the instructions below. See Fig. 10.

- A. Remove the pull springs of middle knife and front point knife.
- B. Move the up skateboard backward, take out the middle knife first and then take out the front point knife.
- C. Wipe the middle knife, front top knife and knife groove clearly.
- D. After cleaning, assemble the front point knife, and then the middle knife and the springs.
- E. Add some lite lube to around the middle knife, front point knife and rear point knife around.

If the machine has been used for long time, and the middle knife and front point knife can not cut off the strap smoothly, take out the middle knife, remove the screws of spring and assemble them to the other side, then

reassemble the middle knife.

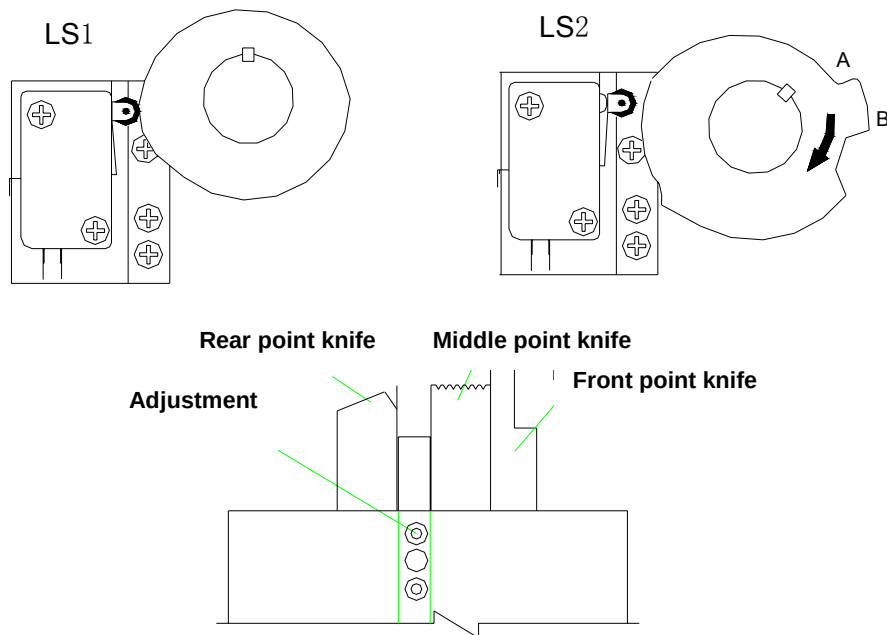


Fig. 10 Knives

MAINTENANCE AND LUBRICATION

The machine requires periodic maintenance and lubrication. Do not keep the product in the wet and moist place in order to prevent the danger of fine or electrical damage. Always keep it dry.

The material of the strap is PP, which is easily out of shape if in high temperature and fire. Please do not place the strap near the inflammable and explosive products. If the strap is bend or out of shape, the machine may appear trouble and cannot strap normally. Cleaning and lubricating is important measures to prolong its service life. The strap powder and slices can be caused by friction during the strapping and usually gather in space between machine head and electrical component. The powders must be cleaned up in time, at least once a week. (Cut off the power supply during cleaning.)

⚠ WARNING: Only trained or professional personnel can service the machine. Make sure the machine is cool and the wire plug has been disconnected before servicing.

1. On a weekly basis, clean out the rubbish in the machine.
 - Move the machine panel, use the air gun to blow the dust and use lubricant to clean the inside parts listed below.
 - The moving place of up and down slide board.
 - Electric heating head moving place.
 - The inside of the hole of three knives.
 - Check all of the spring tension force to see if adjustment is required.
 - Check if the store strap balancing pole is flexible through the simple moving.
 - Check how to strap with some cartons, please be careful with the default, which can see and hear and check the correct running.
2. On a monthly basis (or strap 100000 times cycles),
 - Check if the bolt of mechanism is flexible.
 - Check if the roller of feeding strap is flexible.

- Check if the temperature of electric heating head has changed.
 - Check if the belt has worn.
 - Check if the spring force is correct.
3. Once of half a year (or strap 600000 times cycles)
- Check the heating mechanism, change them if it is the possibility.
 - Check if the connection parts of PC board are reliable.
 - Check all of the switch function.
4. Once a year (or strap 1200000times cycles)
- Clean all of the inner parts and add lubricant.
 - Change the bearing which it has large noise.
 - Check if the arch spring is reliable. Change it if it can not be resetted.

 **WARNING:** Do not add too much oil once, or oil may go into micro-switches causing malfunction.

TROUBLESHOOTING

 **Warning:** Please make sure turn the switch to 「O」 (OFF) position. Pull out the plug and screwing out the bolts that fix the table panel. Open the panel to adjust. It may occur shock or hurt caused by machine start. Screw up the bolt and then get through power supply.

No	Trouble	Cause	Troubleshooting
1	No action after insert the strap	LS4 micro switch fault	LS4 micro switch fault or shrapnel is blocked by foreign material and cannot touch connect point.
		PC board or switch power not good	Replace PC board or switch power.
2	Not send strap automatically	The potentiometer that control the length on null line	Adjust the feed strap knob, every scale about one meter. Adjust clockwise, adjust scope bigger send strap longer. No sending strap when it is in zero position.
		Thread strap incorrectly	Thread the strap according to the manual or the diagrammatic sketch at the right side of the door.
		There is foreign material in the up and down extension	Clean the machine periodically.
3	Not cut strap	The bearing of middle knife is broken	Cause by improper operation. Replace the bearing
		Cutter of the middle knife is worn	There are two cutter sides. Change to another side to continue.
4	Adhesive not good	Temperature adjust improper	If the max temp. can no adhesive well, adjust the W2 on the PCB to increase the temp.
		The spring on the heater fault	The spring is exhausted. Replace it.
		Heater piece adjust improper	Heater piece is not in right position and touch the PP strap or knife, so that it cannot heat. Adjust it accordingly.
		The bearing of middle knife is broken	Replace the bearing.
		The temperature is too high	Check whether the fan is faulty. Repair or replace it.
		The tension force is too large	Adjust to make the tension smaller. Or increase the cooling time.
5	Cannot reset	LS4 micro switch fault	LS4 contact point cannot release. Adjust the shrapnel gap. Check if there anything blocks the shrapnel.
		LS1 not good	Cannot detect the position. PCB faulty lamp flicker. Replace LS1.
6	Cut strap while no tension	LS2 not good	Retreat strap cannot detect the position. PCB faulty lamp flicker. Replace LS2.
		Tension is too small	Adjust to make the tension bigger. Adjust W1 on PCB to make it bigger.

Chart 1 Knife and skateboard assembly



Chart 1 Knife and skateboard assembly

NO.	Code	Description	Qty
01	AS1-11	1# knife combination	1
02	AS1-12	2# knife combination	1
03	AS1-13	3# knife combination	1
1	A0200	Mechanism base	1
2	A0173	Right press bar	1
3	A0172	Left press bar	1
4	A0171	Up skateboard	1
5	A0191	Up skateboard barrier sheet	1
6	A0192	Skateboard extension spring	1
7	A0205	Out with adjusting block	1
8	A0214	Spring drawing board	1
9	A0204	Skateboard arm	1
10	A0201	Electric heating arm	1
11	AS1-114	1# knife	1
12	AS1-117	2# knife	1
13	AS1-118	3# knife	1
14	A0107	Cross bar	1
15	A0131	Contacts copper sleeve	1
16	A0130	Bottom slide contact	1
17	EW001	Micro switch, no roller	1
18	A0107	Cross bar	1
19	A0206	Heat-resistant cover	1
20	A1079	Electric heating head	3
21	A1081	Electric heating press sheet	3
22	A1080	Electric heating bakelite sheet	1
23	A0202	Electric head fixed block	1
24	A0203	Electric heating fixing board	1
25	A0209	Rocker arm shaft	1
26	A0210	Rocker arm shaft base	1
27	AS1-115	Knife neck	1
28	AS1-116	Knife screw	1
29	AS1-513	Cross bar screw	1
30	HL101122	Long extension spring $\phi 1.0 \times \phi 10.8 \times 22$	1
31	A0211	Send with spring	1
32	A1100	Tensioning press spring	1
33	HY231042	Spring in knife $\phi 2.3 \times \phi 10 \times 42$	1
34	A0132	Skateboard extension spring	1
35	A1094	Electric tension spring	1
36	HL121020	Short extension spring $\phi 1.2 \times \phi 10 \times 20$	1

Chart 2 Cam and reduction gear box assembly

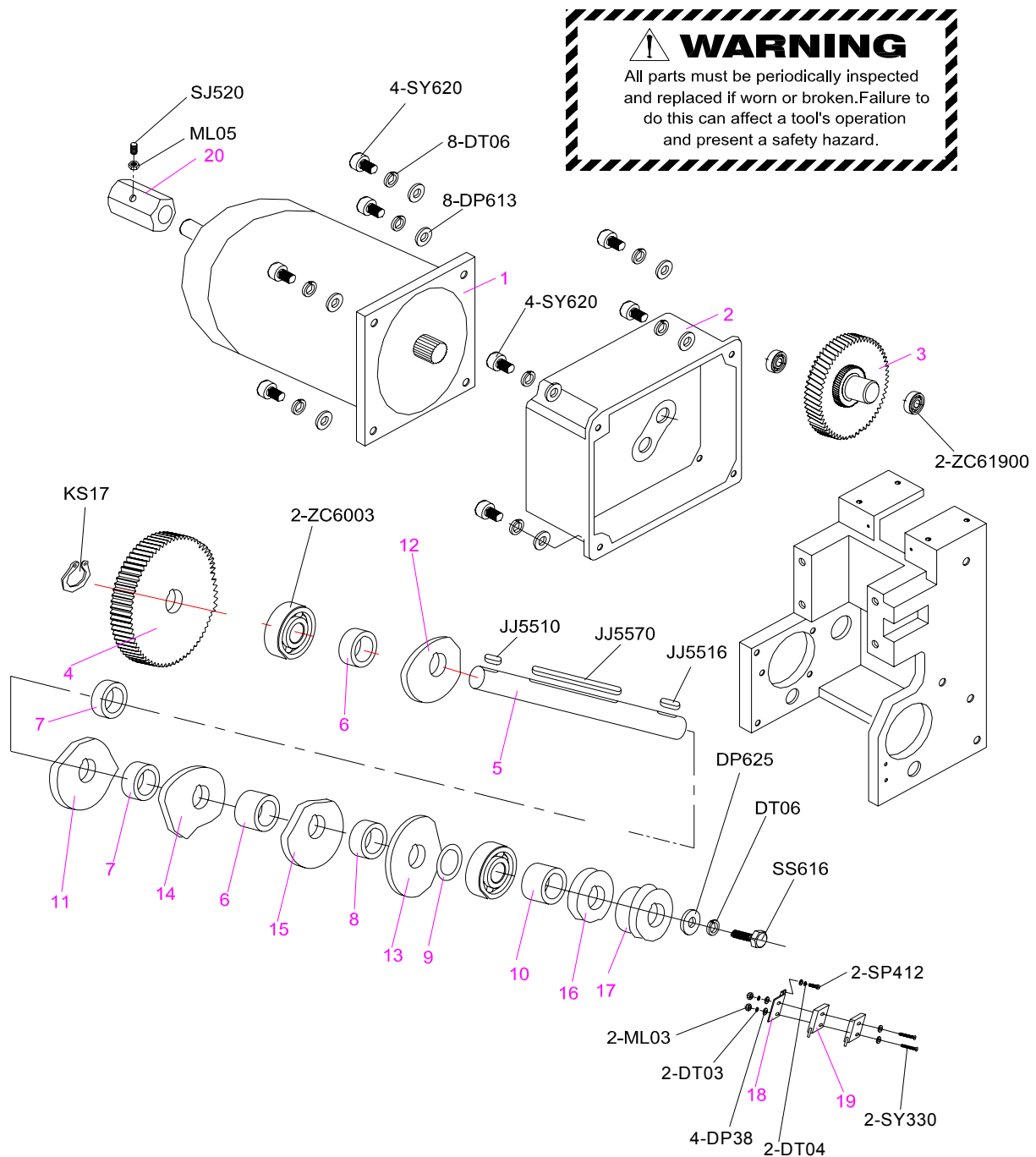


Chart 2 Cam and reduction gear box assembly

Chart 2 Cam and reduction gear box assembly

NO.	Code	Description	Qty
1	EA012	DC cam motor	1
2	A0150	Gear box cover	1
3	A0152	Transition gear wheel	1
4	A0151	Output gear wheel	1
5	A0135	Cam shaft	1
6	DJ172912	Cushion ring $\phi 17*29*12$	2
7	DJ17298	Cushion ring $\phi 17*29*8$	2
8	DJ17296	Cushion ring $\phi 17*29*6$	1
9	DW17295	Cushion ring $\phi 17*29*0.5$	1
10	A0208	Cam spacer	1
11	A0139	Skateboard cam	1
12	AS1-207	3# knife cam	1
13	AS1-208	Electric heating cam	1
14	A0140	2# knife cam	1
15	AS1-205	1# knife cam	1
16	AS1-210	Cross bar reset cam	1
17	A0137	Retreat strap cam	1
19	AS1-215	Micro switch base sheet	1
21	EW002	Micro switch, with roller wheel	2
24	A0153	Motor fixing sleeve	1

Chart 3 Feeding and retracting strap assembly

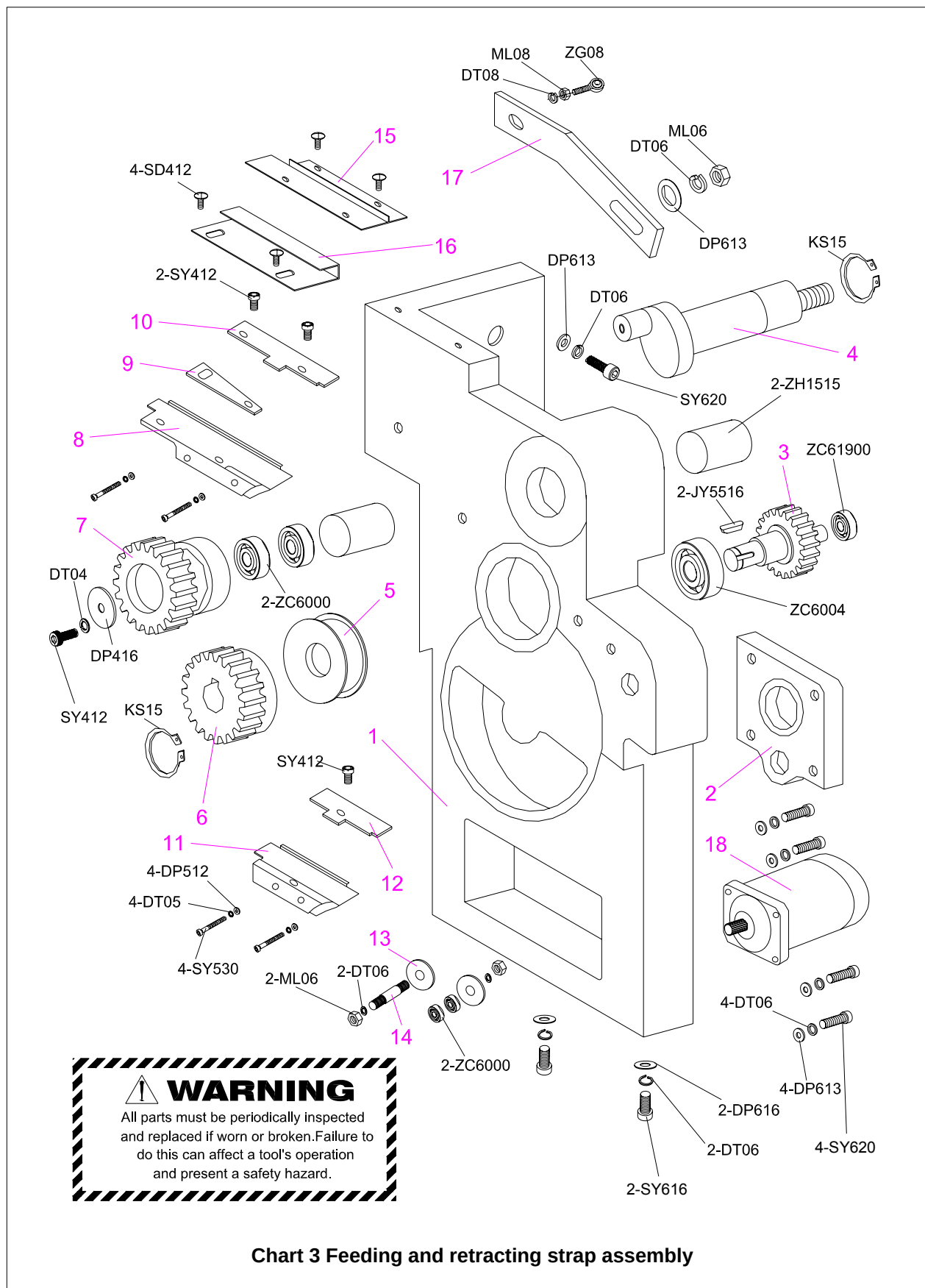


Chart 3 Feeding and retracting strap assembly

Chart 3 Feeding and retracting strap assembly

No	Code	Description	Qty
1	A0180	Seat belt machine	1
3	A0181	Gear cover	1
2	A0182	Reduction gear	1
4	A0184	Eccentric shaft	1
5	A0183	Send pulley	1
6	A0220	Iron gear	1
7	A0221	Driven wheel	1
8	A0186	Band road	1
9	A0105	Adjustment board	1
10	A0188	Band road cover	1
11	A0187	Under band road	1
12	A0189	Under cover band road	1
13	A0170	Pulley gasket	2
14	A0190	Pulley shaft	1
15	A0222	aluminum insert	1
16	A0223	Plug belt adjustment edition	1
17	A0185	Tied tight rod	1
18	EA013	DC motor retreat	1

Chart 4 Machine frame

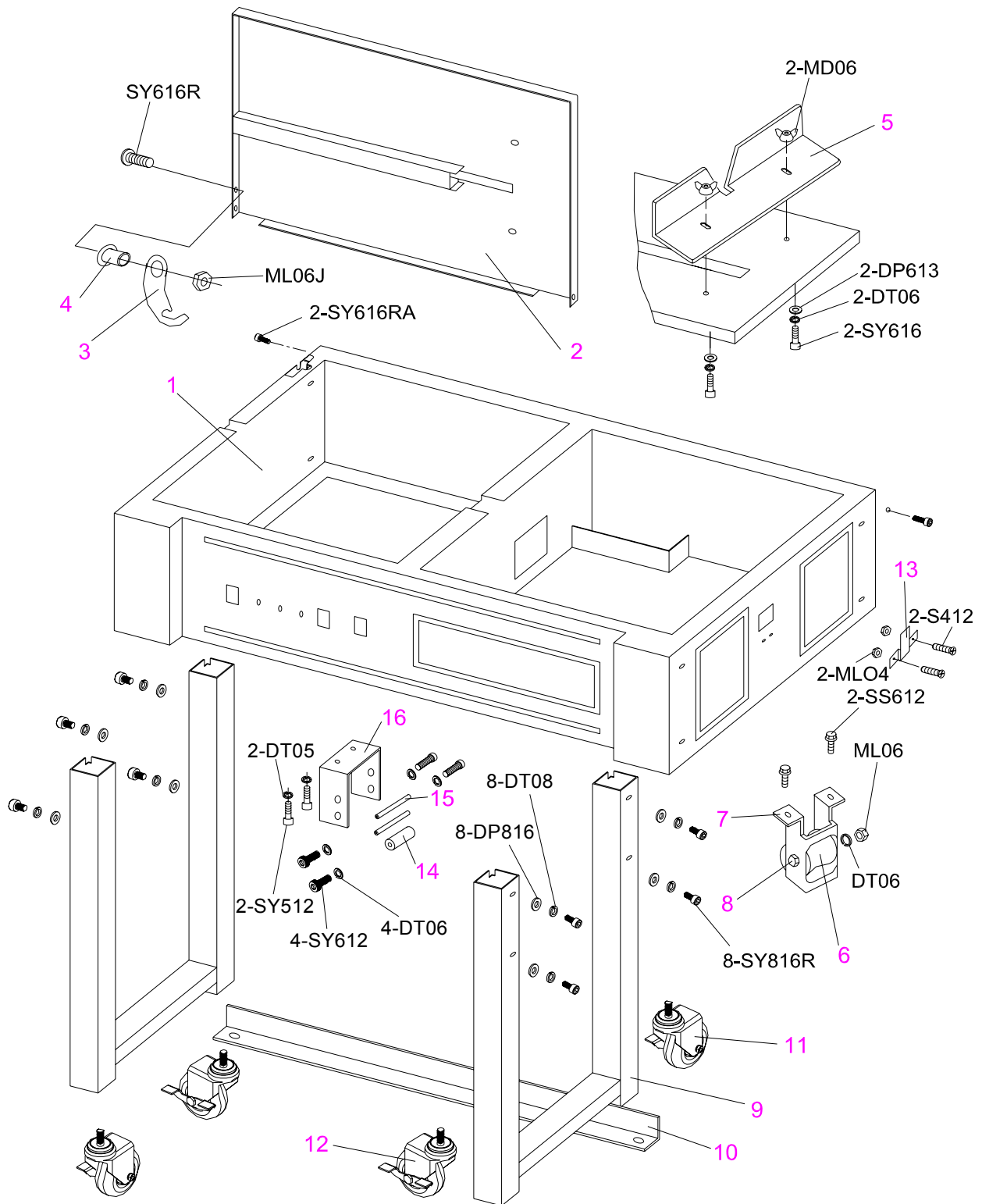


Chart 4 Machine frame

Chart 4 Machine frame

No	Code	Description	Qty
1	A0010	AS-50 frame	1
2	A0011	AS-50 stainless steel table panel	1
3	AS1-611	Arch support	1
4	AS1-612	Cover support protruding sleeve	1
5	A0090	Stainless steel iron blocking device	1
6	AS1-614	Guide strap pulley	1
7	A0014	pulley rack	1
8	AS1-615	Guide strap pulley shaft	1
9	A0016	Angle iron legs tube	0-2
9	A0018	Square tube legs tube	0-1
10	A0017	Angle iron beams strengthened	0-2
10	A0019	Square tube beams strengthened	0-1
11	LA1675	Screw stem universal castor	2
12	LB1675	Screw stem universal castor with brake	2
13	AS1-601	Guide strap pulley	1
14	A0027	Interrupt micro switch contact sheet	1
15	A0028	Guide strap pulley shaft	2
16	A0029	Guide strap pulley rack	1

Chart 5 Strap reel and brake assembly

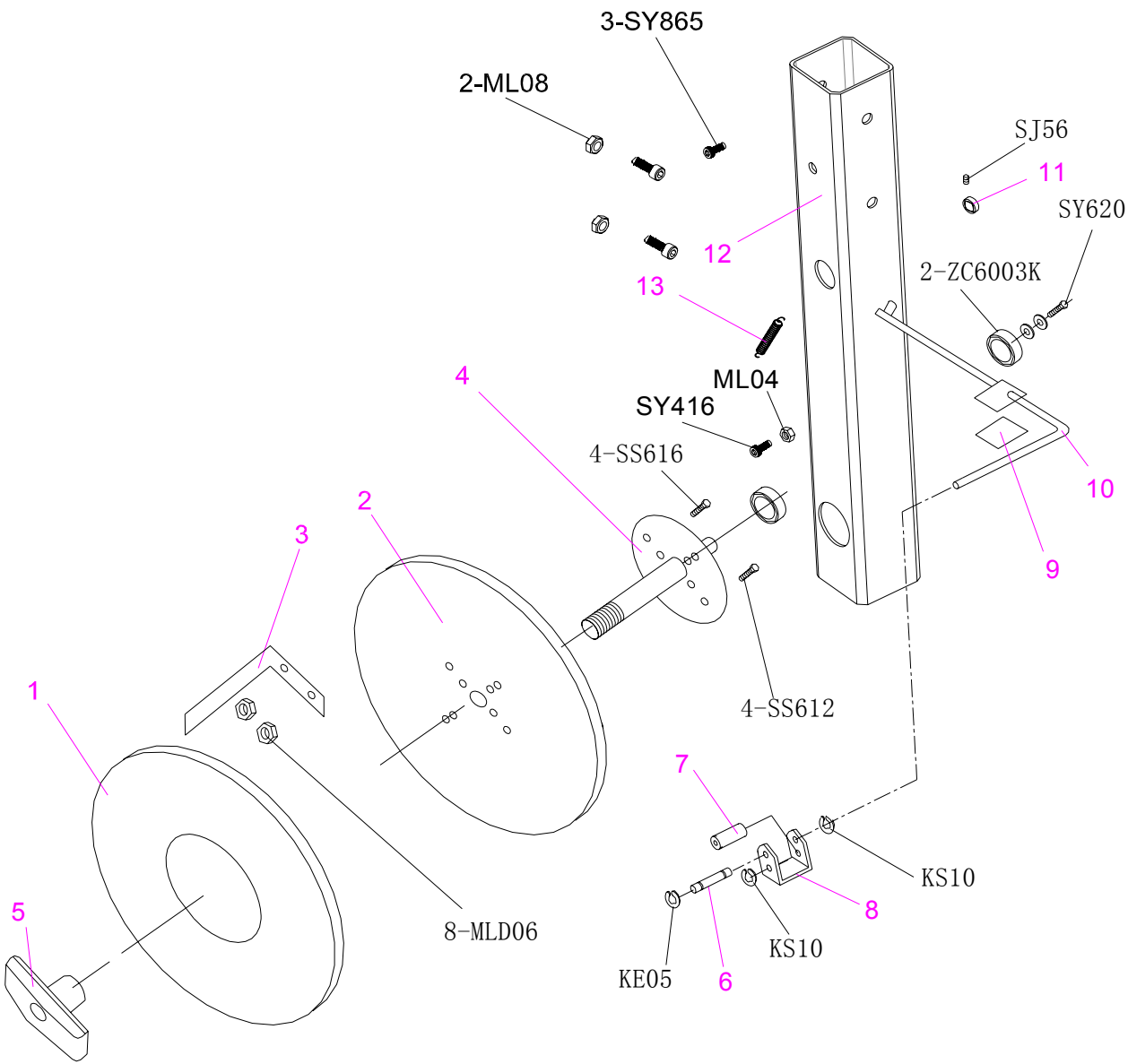


Chart 5 Strap reel and brake assembly

Chart 5 Strap reel and brake assembly

No	Code	Description	Qty
1	A0061	Outside strap reel	1
2	A0060	Inside strap reel	1
3	A0402	Brace claw	4
4	A0050	AS-50 strap reel shaft	1
5	AS1-709	strap reel handle	1
6	AS1-801	Brake rod pulley	1
7	AS1-802	Brake pulley	1
8	AS1-803A	Brake rod roller wheel support	1
9	AS1-814	Brake belt	1
10	A0015	AS-50 brake rod	1
11	A0064	Small fixed sleeve	1
12	A0404	Reel support tube	1
13	A0400	brake spring	1

Chart 6 Electrical parts

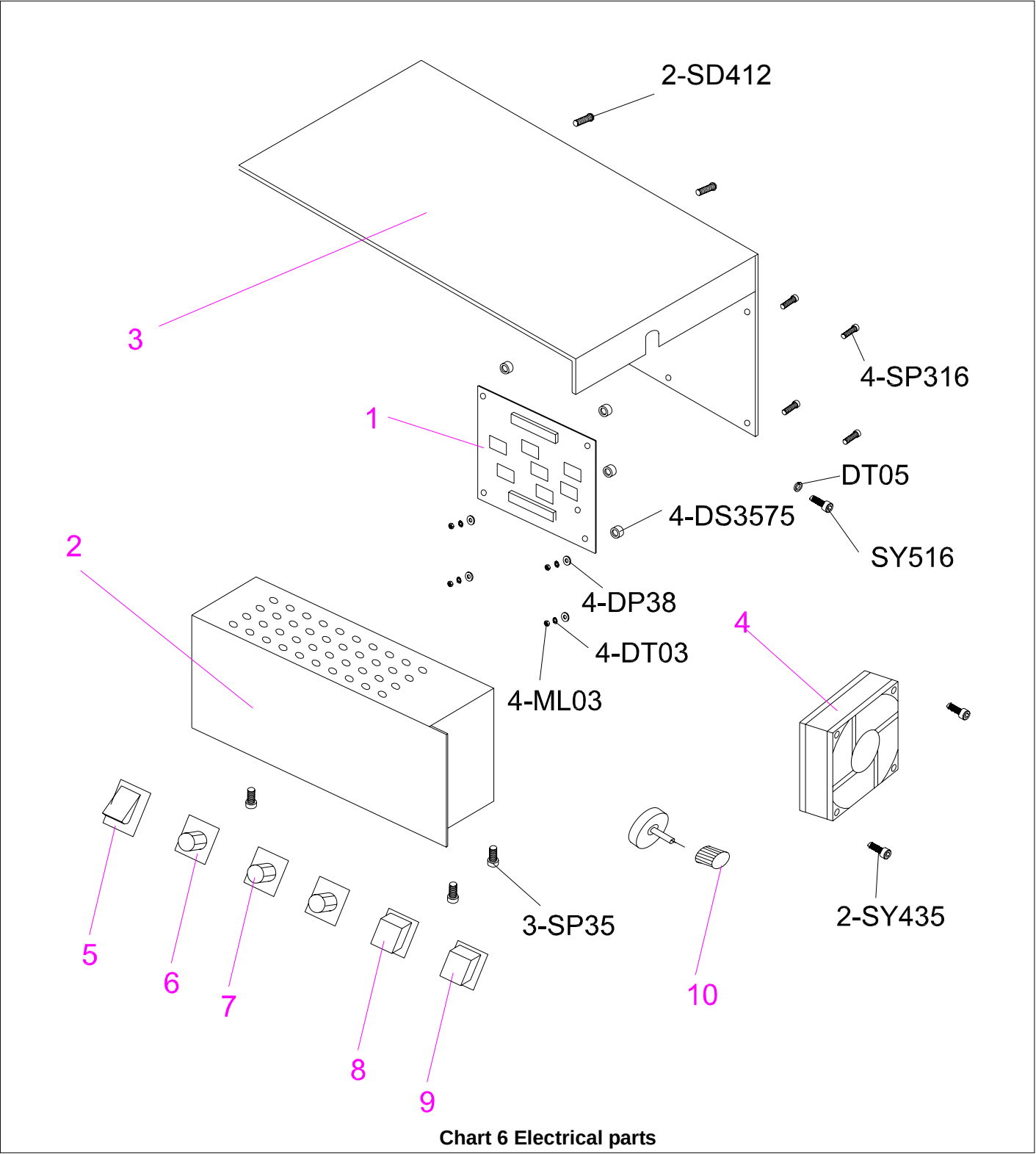


Chart 6 Electrical parts

No	Code	Description	Qty
1	APC-10N1	PC board combination, APC-10N1	1
2	ED001	150W switch power supply	1
3	A0013	Electrical box cover	1
4	EF001	Micro fan 24VDC	1
5	EK002	Red switch	1
6	EP002	Potentiometer 250K	4
7	UN001	Rotate button (black)	3
8	EN001	Green button	1
9	EN002	Yellow button	1
10	UN002	Rotate button (red)	1
11	EF001	Micro fan 24VDC	1
12	AS1-904	Heat proof cover	1
13	A0134	Fan rack	1

WARRANTY

1-year limited warranty



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